

First record of *Cacyreus marshalli* Butler, 1898 (Lycaenidae) from Turkey

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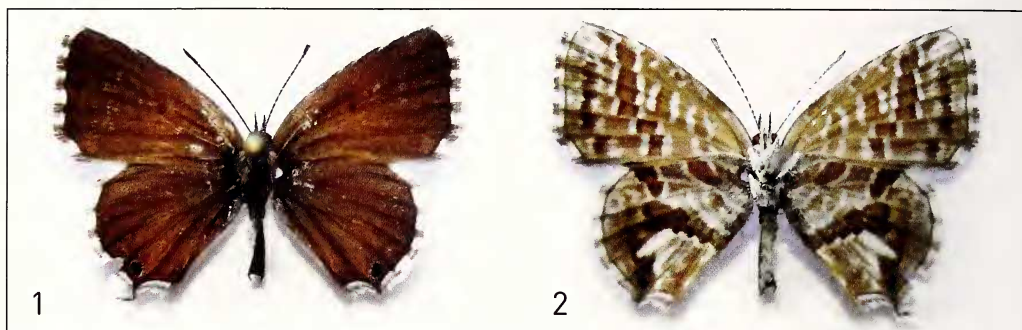
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Cacyreus marshalli Butler, 1898, originally described from South Africa, was accidentally introduced into the Balearic archipelago through importation of its ornamental host plant (*Pelargonium*; Geraniaceae), and has been expanding its range in Europe and northern Africa since 1988 (Marko & Verovnik 2009; Tshikolovets 2011). The first records came from Mallorca (1988), Belgium (1991), mainland Spain (1992), Italy (1996) and Morocco (1997). The current range of the species in the Palaearctic region is given as Canary Islands, Madeira, Morocco, Iberian Peninsula, Balearic Islands, southern France, Corsica, Sardinia, Italy, Switzerland, Slovenia, Croatia, Malta, Greece, as well as single records of introduced individuals from southern England, the Netherlands, Belgium and Germany (Tshikolovets 2011). In Greece, the species was first found on Corfu in 2008 (Parker 2010), and a year later also in Attica (Athens & Spétses Island; Anastassiou et al. 2010; Coutsis et al. 2011; Martinou et al. 2011). Recorded host plants include *Geranium* and *Pelargonium* (Geraniaceae) (South Africa) as well as imported and cultivated *Pelargonium* in Europe (Eitschberger & Stamer 1990; Marko & Verovnik 2009).

Cacyreus marshalli had never before been recorded in Turkey. Our first observation of a specimen was in Gündoğan (Bordum district) in August 2011. Because no specimens were collected and photographed at that time, the region was surveyed again in 2012. On the 23rd of October 2012, we collected the first male specimen (Figs 1, 2) in Bodrum, Gündoğan (N 37° 8' 56.48", E 27° 20' 9.55"; Fig. 3), nectaring on *Pelargonium*. The specimen is currently deposited in the research collection of the first author. A systematic investigation of the scale of larval damage to *Pelargonium* plants in the area remains to be done. This area is a touristic region in the southwest of Turkey near the Aegean Sea. The approximate location of our observation in Turkey is given in the distribution map (Fig. 3). Bodrum Peninsula is only about 15 km linear distance from the Greek Dodecanese island of Kalymnos, where *C. marshalli* was observed at several locations near Panormos in October 2011 (Kissling 2012). It is to be expected that this invasive species will spread further in the Eastern Mediterranean Region along the Turkish coast.



Figs 1, 2. *Cacyreus marshalli* specimen from Turkey 1. Upper side. 2. Underside.



Fig. 3. Known distribution of *Cacyreus marshalli* in Europe and North Africa (shaded area; modified from Tshikolovets 2011), and the approximate position of the observation in Turkey (red circle, arrow).

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References

- Anastassiou, H. T., N. Ghavalas & J. G. Coutsis 2010. First record of *Cacyreus marshalli* in Greece, and comments on the potential occurrence of *Zizeeria karsandra* on the Greek island of Crete (Lepidoptera: Lycaenidae). – *Phegea* **38** (3): 85–92.
- Coutsis, J. G., H. T. Anastassiou & N. Ghavalas 2011. An explanatory note on a previous article of ours, population fluctuations of the imported *Cacyreus marshalli* in Greece, and an assessment of its being a potential threat through larval competition to native butterflies with *Geranium* feeding larvae (Lepidoptera: Lycaenidae). – *Phegea* **39** (2): 43–44.
- Eitschberger, U. & P. Stamer 1990. *Cacyreus marshalli* Butler, 1898, eine neue Tagfalterart für die europäische Fauna? (Lepidoptera, Lycaenidae). – *Atalanta* **21** (1/2): 101–108.
- Kissling, T. 2012. *Cacyreus marshalli*. – http://www.lepiforum.de/cgi-bin/2_forum.pl?md=read;id=84671. Accessed December 2012.
- Marko, K. & R. Verovnik 2009. First record of *Cacyreus marshalli* (Lycaenidae) from the Balkan Peninsula. – *Nota lepidopterologica* **32** (1): 81–82.
- Martinou, A. F., D. Papachristos & P. G. Milonas 2011. Report of the Geranium Bronze Butterfly, *Cacyreus marshalli* for mainland Greece. – *Hellenic Plant Protection Journal* **4**: 31–34.
- Parker, R. 2010. *Cacyreus marshalli* Butler, 1898 (Lepidoptera, Lycaenidae) newly recorded for Corfu, with notes on other butterflies on the island in September 2008. – *Entomologist's Gazette* **61**: 40–42.
- Tshikolovets, V. V. 2011. Butterflies of Europe and the Mediterranean Area. – Vadim Tshikolovets publications, 544 pp.